

What is claimed is:

1. An article of footwear including an upper and a sole, the sole comprising, a receiving portion including a biasing assembly; and a ground-engaging member having a removable tip including a leg member depending therefrom, the leg member configured to resiliently displace a portion of the biasing assembly based on a general linear motion of the leg member causing abutment of the portion of the biasing assembly with the leg member, and the portion of the biasing assembly configured to resiliently recover after the resilient displacement so as to provide a snap-fit engagement.
2. The article according to claim 1, wherein said biasing assembly includes a first biasing member and a second biasing member each being oriented with respect to each other such that, in a direction from a proximal end of the first and second biasing members, respectively, to a distal end of said first and second biasing members, respectively, a spacing between the first and second biasing members initially increases and then subsequently decreases.
3. The article according to claim 1, wherein said sole includes a footplate from which said ground-engaging member extends.
4. The article according to claim 3, wherein said footplate is made from a resilient plastic.
5. The article according to claim 1, wherein said sole includes a plurality of said receiving portions and a corresponding plurality of ground-engaging members.
6. The article according to claim 5, wherein said sole includes a forefoot region and a heel region, said forefoot region including a greater number of said ground-engaging members than said heel region.

7. The article according to claim 1, wherein said biasing assembly includes first and second said biasing members, said first and second biasing members each defining an obtuse angle and being oriented with respect to each other such that, in a direction from a proximal end of said first and second spring members, respectively, to a distal end of said first and second spring members, respectively, a spacing between said first and second spring members initially increases and then subsequently decreases.

8. The article according to claim 2, wherein said receiving portion includes a raised base having a bore formed therein through which said biasing assembly extends, said removable tip configured for snap-fit engagement with said raised base.

9. The article according to claim 8, wherein said tip includes a head and a pair of spaced apart said leg members both extending in generally the same direction from said head, wherein said biasing assembly is arranged between said pair of leg members, each said leg member being shaped in substantial conformance with a shape of a respective said biasing member of said biasing assembly so as to provide a snap-fit engagement between said pair of leg members and said biasing assembly.

10. The article according to claim 9, wherein at least one said leg members has a rib formed on an exterior surface thereof, and an interior wall of said bore has a slot formed therein corresponding to said rib, said rib being positioned on said at least one leg member and said slot being formed in said interior wall of said bore, respectively, so as to align said leg members and said biasing assembly for said snap-fit engagement therebetween.

11. The article according to claim 10, wherein said tip further includes a medial rib extending from said head between said leg members.

12. The article according to claim 11, wherein said medial rib extends between respective distal ends of said pair of biasing members.

13. The article according to claim 2, comprising a plurality of said removable tips, said plurality of tips being interchangeably snap-fit engageable with said receiving portion.

14. The article according to claim 8, wherein said sole includes a plurality of said receiving portions each including a respective raised base, each said raised base extending substantially the same distance from said sole.

15. The article according to claim 8, wherein said sole includes a plurality of said receiving portions each including a respective raised base, each said raised base having a respective said tip in snap-fit engagement therewith, at least two of said tips extending different respective distances from their said respective bases.

16. The article according to claim 8, wherein said sole includes a plurality of said receiving portions each including a raised base, each said raised base having a respective said tip in snap-fit engagement therewith, wherein each of said tips extends substantially the same distance from said respective bases.

17. The article according to claim 1, wherein said biasing assembly comprises glass-filled nylon 12 or polyetherimide.

18. An article of footwear comprising a sole, said sole including:  
a receiving portion; and  
a ground-engaging member in snap-fit engagement with said receiving portion, wherein one of said receiving portion and said ground-engaging member includes a rib formed thereon, and the other of said receiving portion and said ground-engaging member includes a slot formed therein, said rib and said slot cooperating to prevent rotation of said ground-engaging member.

19. The article according to claim 18, wherein said ground-engaging member includes a replaceable tip, said tip being in snap-fit engagement with said receiving portion, wherein one of said receiving portion and said tip includes a rib formed thereon, and the other

of said receiving portion and said tip includes a slot formed therein, said rib and said slot cooperating to prevent rotation of said tip.

20. The article according to claim 18, wherein said receiving portion includes a spring assembly and said tip includes a head and a pair of spaced apart leg members extending from said head in generally the same direction, wherein at least one said leg member has a rib formed along at least a part of a length of said at least one leg member and said spring assembly comprises a support frame formed about a plurality of spring members, said support frame defining a said slot cooperating with said rib and said spring assembly being engaged between said leg members.

21. A method of attaching a ground-engaging portion to an article of footwear having a sole, comprising:

engaging a ground-engaging tip portion with a receiving portion of the sole by applying a rectilinear force to the tip portion until the tip portion audibly comes into resilient engagement with the receiving portion.

22. The method of claim 21, wherein engaging the tip portion with the receiving portion comprises engaging a leg assembly of one of the tip portion and the receiving portion with a spring assembly of the other of the tip portion and the receiving portion, the spring assembly being resiliently retained between respective legs of said leg assembly.

23. The method of claim 22, further comprising aligning the tip portion relative to the receiving portion before engaging the leg assembly with the spring assembly, said aligning step including:

providing a rib on the tip portion or the receiving portion and a corresponding slot on the other of the tip portion and the receiving portion; and

aligning the rib and the slot, the rib and the slot being respectively located so as to permit linear engagement of the leg assembly and the spring assembly.

24. A method of changing ground-engaging characteristics of an article of footwear provided with a plurality of ground-engaging elements on a sole of the article of footwear, each ground-engaging element including a replaceable tip engaged with the sole, the method comprising:

disengaging a first tip from the sole with a linear motion; and

replacing the disengaged first tip by engaging a second tip with the sole, the second tip extending a different distance from the sole than the disengaged first tip.

25. The method according to claim 24, comprising disengaging a plurality of first tips from the sole and replacing each disengaged first tip by engaging a respective second tip with the sole, at least some of the second tips extending a different distance from the sole than the respective first tips corresponding thereto.